AI1110: PROJECT REPORT

Tera Keshavardhan Reddy*
AI22BTECH11029

The above code is a Python script that plays a playlist of songs using the pydub library. Here's a description of what the code does:

1) It imports the necessary modules: numpy for shuffling the playlist, pydub for working with audio files, and play from pydub.playback for playing the songs.
2) It defines a list called playlist that contains the file paths of the songs in the desired order.
3) It loads the songs from the file paths using a list comprehension and assigns them to the songs list.
4) The np.random.shuffle() function shuffles the order of the songs in the songs list using NumPy's random module.
5) It initializes the playlist index (index) to 0 and the repeat flag (repeat) to False.
6) The code enters an infinite loop that plays the songs one by one.
7) Inside the loop, it retrieves the current song from the songs list based on the current index.
8) It prints the name of the current song using print("Now playing:", song).
9) The play(song) function plays the current song.
10) It prompts the user for input by displaying the message "Press Enter to continue or 'r' to replay".
11) If the user enters 'r', the repeat flag is set to True.
12) If the user enters anything else or presses Enter, the repeat flag is set to False.
13) If the repeat flag is True, the loop continues from the beginning, replaying the current song.
14) If the repeat flag is False, the code increments the index by 1 to move to the next song.
15) If the end of the playlist is reached (when index is equal to the length of the songs list), the index is reset to 0, and the playlist starts over from the beginning.

The code continues playing songs from the shuffled playlist until it is manually interrupted.

```
keshavardhan@keshavardhan-Victus-by-HP-Gaming-Laptop-15-fa0xxx:~$ python3 project.py
Now playing: <pydub.audio_segment.AudioSegment object at 0x7f625213dd50>
Input #0, wav, from '/tmp/tmpscc00a0i.wav':   0KB sq=    0B f=0/0
  Duration: 00:00:43.07, bitrate: 1411 kb/s
  Stream #0:0: Audio: pcm_s16le ([1][0][0][0] / 0x0001), 44100 Hz, 2 channels, s16, 1411 kb/s
  25.56 M-A: -0.000 fd=   0 aq=  176KB vq=    0KB sq=    0B f=0/0
```

*The student is with the Department of Artificial Intelligence, Indian Institute of Technology, Hyderabad, 502285, India.
e-mail: ai22btech11018@iith.ac.in.